

Regional Anatomy Syllabus

(For international medical students)

Department of Human Anatomy
Chongqing Medical University
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Preface

1. COURSE DESCRIPTION

Regional anatomy is designed to meet the needs of our teaching method, teaching program and the various curriculums of Chinese medical education. It gives its top priority in the combination of theory with clinical practice and serves as a dissector. It has been built on the assumption that students have mastered the course of *systematic anatomy* and it focuses on the dissection.

The technique of human dissection is acquired only by practice.

Fortunately, the students will develop an adequate technique in a relatively short time. The technique of human dissection often requires patience rather than great skill. The method of dissecting the body is a regional one, in which the design is to see everything that is to be seen in a single area of the body at one time. In approaching any region of the body first identify the surface landmarks. Then reflect the skin from that region. The structures to be exposed and studied after the skin is fascia. The dissection consists to a very great extent in removing the fascia without injuring the structures it contains. This process—the cleaning of the embedded muscles, nerves, arteries and other structures—is a tedious business. After finishing the dissection, the students should take time to review and study the structures as they appear in the body. A definite plan of study should be followed for each structure dissected. This plan should

include the plane or part of the body in which it is located; the form, size, and shape of the structure; its origin, course, and distribution; and its function.

2. CONDUCT OF THE COURSE

This course will consist of two 160-minute per week. Be prepared for in-class dissection and discussion by reading the assigned material prior to class. Students will be evaluated by their dissections and quizzes.

Attendance of both the lecture and the laboratories is mandatory.

Notification of the instructor prior to an absence is strongly recommended, and absences are excused only for valid reasons (e.g. medical or legal reasons, or emergencies).

3. COURSE OBJECTIVES

After completion of this course, the student will be able to:

1. master the basic skills of human dissection;
2. master the layer's structures and the relationship between layers in terms of each region ;
3. master the important organs' location, form, blood supply and nerve innervations;

Textbook and references

Gray's Anatomy for Students, ISBN 0-443-0661204

Cunningham's Manual of Practical Anatomy, 15th Edition, Oxford
University Press

Last's Anatomy—Regional and Applied, 10th Edition, Churchill
Livingstone

Grant's Atlas of Anatomy, 11th Edition, Agur & Lee, Williams &
Wilkins

Regional Anatomy, 2rd edition, Yu Guiying 主编 吉林科技出版社

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Distribution of Class Hours	6
Chapter 1 Lower limb	7
Chapter 2 Upper limb	10
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Distribution of the Class Hours (total 108 hours)

		Class	Lab
Chapter content		Teaching	Dissection
		Hours	Hours
Chapter 1	Lower limb	6	18
Chapter 2	Upper limb	10	18
Chapter 3	Neck	4	12
Chapter 4	Thorax	2	6
Chapter 5	Abdomen	14	18

Chapter1 Lower limb

I . Introduction of regional anatomy, Superficial structure of lower limb

[Teaching Aim and Requirements]

- (1) Master the general construction of the body
- (2) Master the superficial veins, nerves and lymph nodes in the superficial layer of lower limb
- (3) Understand the definition of regional anatomy
- (4) Understand the using of the dissecting instruments

[Teaching Contents]

- (1) the definition of regional anatomy
- (2) The contents in superficial structure of lower limb
- (3) The basic skills of skin-reflection

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

- (1) How to separate the veins
- (2) How to do the skin-reflection

II .Femoral triangle, femoral canal

[Teaching Aim and Requirements]

- (1) Master the concepts and boundaries of the femoral triangle and

femoral canal

- (2) Master the main contents in the femoral triangle and femoral canal
- (3) Master the relationships of the main contents

[Teaching Contents]

- (1) the concepts of the femoral triangle and femoral canal
- (2) the main contents in the femoral triangle and femoral canal

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

- (1) The relationships of the main contents
- (2) How to identify the femoral canal and its boundaries

III. Anteromedial region of thigh

[Teaching Aim and Requirements]

- (1) Master the boundaries of the anteromedial region
- (2) Master the contents and their relationships of the anteromedial region

[Teaching Contents]

- (1) The division and the boundaries of the anteromedial region
- (2) The contents and their relationships of the anteromedial region

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

- (1) The boundaries of the adductor canal
- (2) The branches of the deep femoral artery

IV. Gluteal region , back of the thigh

[Teaching Aim and Requirements]

- (1) Master the layers of the gluteal region
- (2) Master the arteries, nerves supplied the gluteal region
- (3) Master the muscles and nerves in the back of the thigh

[Teaching Contents]

- (1) The layers of the gluteal region and the back of the thigh
- (2) The main arteries and nerves of the gluteal region and the back of the thigh

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

- (1) The relationships of the arteries and nerves of the gluteal region
- (2) How to dissect the muscles

V. Popliteal fossa, back of the leg

[Teaching Aim and Requirements]

- (1) Master the boundaries , the main contents and their relationships in the popliteal fossa

- (2) Master the divisions, groups of the muscles of the leg
- (3) Master the course of main arteries and nerves in the leg

[Teaching Contents]

- (1) The contents and their relationships in the popliteal fossa
- (2) The divisions of the leg muscles
- (3) The main arteries and nerves supplied the leg

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

- (1) The formation of the genicular arterial network
- (2) How to trace the artery trunk

Chapter2 Upper limb

I .Pectoral region

[Teaching Aim and Requirements]

- (1) Master the boundaries of the pectoral region and axilla
- (2) Master the main branches of the arteries
- (3) Master the formation of the brachial plexus

[Teaching Contents]

- (1) The boundaries and formations of the axilla
- (2) The braches of the axillary arteries
- (3) The formation of the brachial plexus

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

- (1) The branches of the axillary artery
- (2) The formation of the brachial plexus
- (3) Their relationships in the axilla

II. Axillary cavity, superficial structure of the upper limb

[Teaching Aim and Requirements]

- (1) The relationships of the main structures in the axilla
- (2) The superficial vein of the upper limb

[Teaching Contents]

- (1) Observed the structures which have been dissected last time
- (2) The lymph nodes in the axilla
- (3) The formation of the mammary

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

- (1) The relationships of the main structures in the axilla
- (2) The relationships of the superficial veins in the upper limb

III. Anterior part of the arm and the forearm

[Teaching Aim and Requirements]

- (1) Master the boundaries and divisions of the ant. arm and forearm
- (2) Master the course and main branches of the artery trunk
- (3) Master the course and main branches of the nerve

[Teaching Contents]

- (1) The divisions and boundaries of the ant. arm and forearm
- (2) The supplying arteries and nerves
- (3) The muscles and their layers in the ant. arm and forearm

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

- (1) The course and main branches of the artery trunk
- (2) course and main branches of the nerve

IV. Hand

[Teaching Aim and Requirements]

- (1) Master the layers of the hand
- (2) Master the main contents of each layer.

[Teaching Contents]

- (1) The layers of the hand
- (2) The blood and nerve supplies of the hand

(3) The tendons and muscles of the hand

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

(1) The layers

(2) The boundaries and contents of the thenar , hypothenar and central compartments

V .Superficial structure of the hand

[Teaching Aim and Requirements]

(1) Master the layers of the superficial structures of the hand

(2) Master the main contents in each layer

[Teaching Contents]

(1) The formation of the superficial palmar arch and the palmar aponeurosis

(2) The flexor retinaculum and carpal canal

(3) The three compartments and nerves in the palm

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

(1) The boundaries and main contents of the three compartments

(2) The blood and nerve supplies in the superficial structure of the hand

VI. Deep structure of the hand

[Teaching Aim and Requirements]

- (1) Master the layers of the deep structure of the hand
- (2) Master the main contents in each layer

[Teaching Contents]

- (1) The formation of the deep palmar arch.
- (2) The muscles and nerves in the deep structure

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

- (1) The layers in the deep structure
- (2) How to dissect the deep palmar arch

Chapter3 Neck

I .Introduction of neck

[Teaching Aim and Requirements]

- (1) Master the divisions and boundaries of each region in the neck
- (2) Master the superficial structures in the neck

[Teaching Contents]

- (1) The divisions and boundaries of each region in the neck
- (2) The formation of the cervical plexus
- (3) The superficial veins in the neck

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

- (1) How to dissect the superficial branches of the cervical plexus
- (2) How to dissect the platysma

II .Submental and submandibular triangles

[Teaching Aim and Requirements]

- (1) Master the main contents of the submandibular triangle
- (2) The submandibular gland and its setting

[Teaching Contents]

- (1) The formation of each triangle
- (2) The main contents in each triangle

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

- (1) How to dissect submandibular gland and its surrounding structures
- (2) How to identify the lymph nodes and hypoglossal nerve

III.Carotid triangle muscular triangle

[Teaching Aim and Requirements]

- (1) Master the main contents and their relationships in the carotid triangle

(2) Master the organ---thyroid gland

[Teaching Contents]

- (1) The formation of carotid sheath, the branches of external carotid artery and the nerve supply and lymph nodes in carotid triangle
- (2) The location, morphology, blood and nerve supplies of the thyroid

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

- (1) The nerves, the branches of the external carotid in the carotid triangle
- (2) The relationships of the blood and nerve supplies of the thyroid

IV.Root of neck

[Teaching Aim and Requirements]

- (1) Master the formation of the root of neck
- (2) Master the main contents of the root of neck

[Teaching Contents]

- (1) The divisions and branches of the subclavian artery
- (2) Other surrounding structures of the subclavian artery
- (3) The lymph nodes and their divisions

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

- (1) The divisions and branches of the subclavian artery

- (2) Other surrounding structures of the subclavian artery

Chapter4 Thorax

Thorax

[Teaching Aim and Requirements]

- (1) Master the formation of the thorax
- (2) Master the main contents in the thorax

[Teaching Contents]

- (1) The boundaries of the thorax, the intercostals structures, the arrangements of the root of lung
- (2) The divisions and the arrangements of the mediastinum

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

- (1) The intercostals structures
- (2) The arrangements of the mediastinum

Chapter5 Abdomen

I .Anterolateral abdominal wall

[Teaching Aim and Requirements]

- (1) Master the layers of the anterolateral abdominal wall
- (2) Master the features of each layer

[Teaching Contents]

- (1) The layers of the anterolateral abdominal wall
- (2) The muscles, nerves and vessels of the anterolateral abdominal wall
- (3) The formation of the rectus sheath

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

- (1) The features of each layer
- (2) The formation of the rectus sheath

II .Inguinal region

[Teaching Aim and Requirements]

- (1) Master the boundaries and contents of the inguinal region
- (2) Master the formation of the inguinal canal

[Teaching Contents]

- (1) The boundaries, contents of the inguinal region
- (2) The boundaries and formation of the inguinal canal

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

- (1) The formation of inguinal canal
- (2) How to dissect the inguinal canal

III. Abdominal incision, discussion

[Teaching Aim and Requirements]

- (1) Master the basic criteria of choosing incision
- (2) Master how to do the incision in different situations

[Teaching Contents]

- (1) The basic criteria of choosing incision
- (2) The different situations have different incisions

[Teaching Methods]

Taught by teacher and discussed by students

[Focal and Difficult Points]

- (1) The basic criteria of choosing incision
- (2) How to do the incision in different situations

IV. The peritoneum and peritoneal cavity

[Teaching Aim and Requirements]

- (1) Master the concepts of the peritoneum and peritoneal cavity
- (2) Master the main peritoneal reflections and the divisions of the peritoneal cavity

[Teaching Contents]

- (1) The concepts of the peritoneum and peritoneal cavity
- (2) The functions of the peritoneum
- (3) The main peritoneal reflections and the division of the peritoneal

cavity

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

- (1) The main peritoneal reflections
- (2) How to identify the different peritoneal spaces

V. The supracolic compartment

[Teaching Aim and Requirements]

- (1) Master the main organs in the supracolic compartment
- (2) Master the formation of the celiac trunk and the nerve supply of the gaster

[Teaching Contents]

- (1) The formation and branches of the celiac trunk
- (2) The lesser omentum, omental bursa and their contents

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

- (1) The boundaries of omental bursa
- (2) The branches of the celiac trunk and vagus nerve

VI.The infracolic compartment

[Teaching Aim and Requirements]

- (1) Master the small intestine and large intestine in the infracolic compartment
- (2) Master the blood supply of the intestines

[Teaching Contents]

- (1) The formation and containing vessels in the mesentery
- (2) The blood supply of the intestines

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

- (1) How to distinguish the ileum and jejunum depending on the blood supply
- (2) The branches of the sup. and inf. mesenteric arteries.

VII.Pelvis

[Teaching Aim and Requirements]

- (1) Master the formation of pelvis and the main viscera in pelvis
- (2) Master the divisions of perineum and the main contents in perineum

[Teaching Contents]

- (1) The boundaries and divisions of pelvis
- (2) The formation of pelvic walls, the pelvic vessels, the pelvic viscera

(3) The divisions and main contents in perineum

[Teaching Methods]

Taught by teacher and dissected by students themselves

[Focal and Difficult Points]

(1) The formation of pelvic walls

(2) The divisions and main contents in perineum